
Appendix A

Site Diagrams

Diagram 1: Site Location Map

Diagram 2: Site Plan

Diagram 3: Evacuation

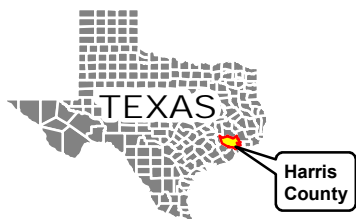
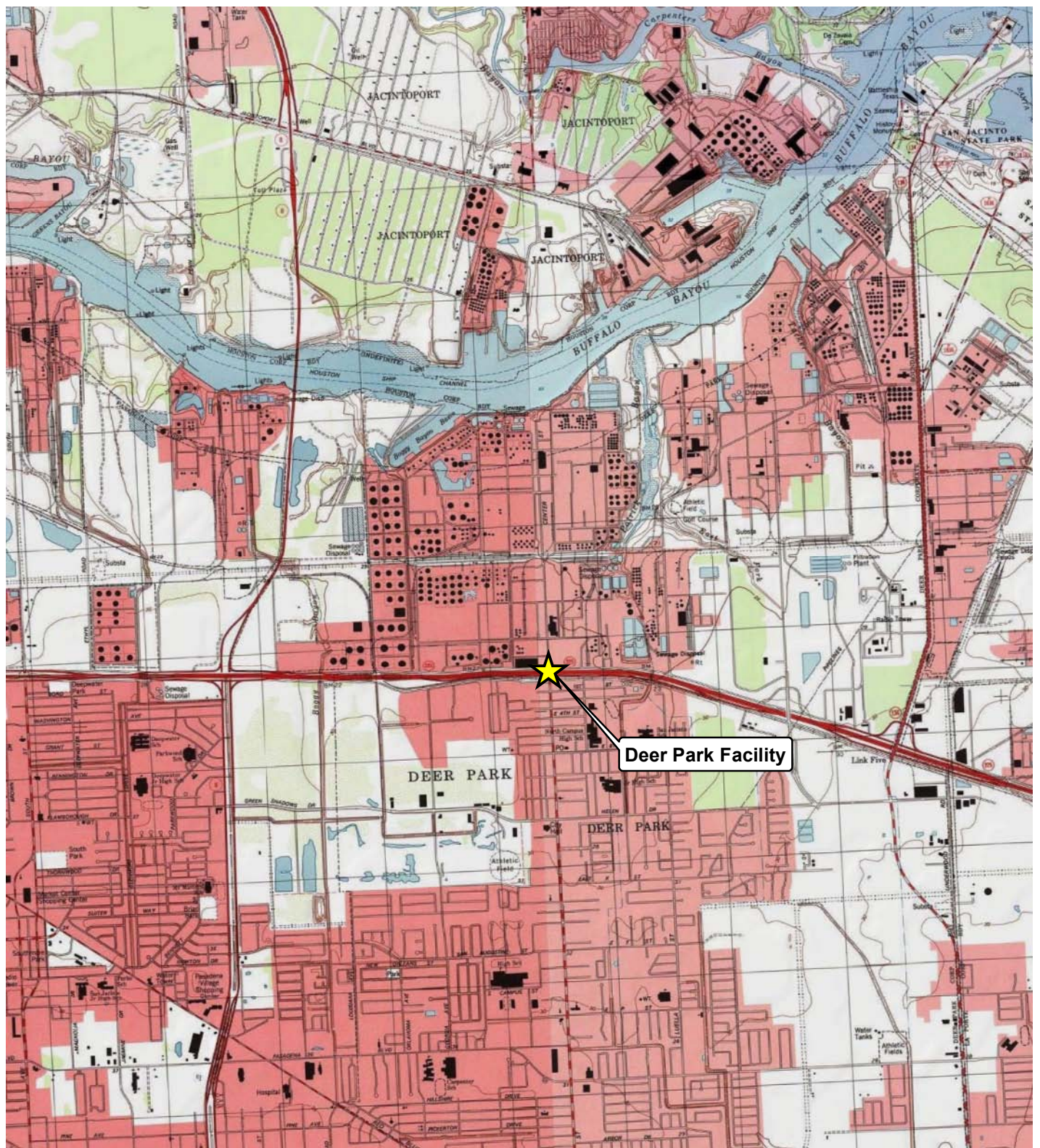
Diagram 4: Surface Water Storage and Pump Back Locations

Diagram 5: Drainage Basins & Outfall Locations

Diagram 6: Oil Boom Box Locations and Booming Strategies

Diagram 7: Dock Locations and ER Equipment

Diagram 8: Emergency Response Equipment



Legend



Deer Park Facility



1:48,000

1" = 4,000'

SHELL CHEMICAL FRP






**DIAGRAM 1
SITE LOCATION MAP**

DATE: October 2021











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LEGEND

-  OXIDENTAL CHEMICAL COMPANY
 MOMENTIVE (FORMERLY HEXION)
 DEER PARK COGENERATION
 AIR PRODUCTS
 COLEX FACILITY

SEWER TYPES

- | | | |
|---|-----|-----------------------------|
|  | SS | STORM SEWER |
|  | PS | PROCESS SEWER/ OILY SEWER |
|  | SAN | SANITARY SEWER |
|  | ACD | ACID SEWER |
|  | CAU | CAUSTIC SEWER |
|  | DEA | DEA SEWER |
|  | SUL | SULFINOL OR SULFOLANE SEWER |
|  | PHE | PHENOL SEWER |
|  | X | UNKNOWN SEWER TYPE |
|  | X | UNKNOWN SEWER TYPE |

NOTES

1. Due to the complexity of the Deer Park Facility, it is not practical to indicate all oil storage containers, 55-gallons or greater, oil transfer piping, mobile and portable containers, and oil-filled equipment on the facility diagram. More detailed information and drawings are available at the facility for use during spill response activities.

2. Transformers are listed in the SPCC Plan and are shown as "Sub-XX" on this map.

3. Oil mist generator (OMG) and bulk oil tank (BOT) locations are shown as:

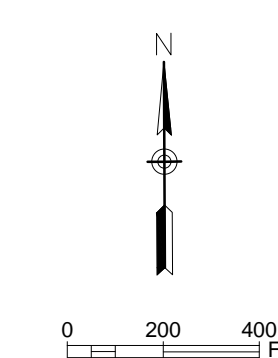
- (XX) LOCATION NUMBER BOT
(XX) LOCATION NUMBER OMG

The tank number corresponds to the SPCC Tank Table in the SPCC Pplan.

DWG SOURCE:

DWG SOURCE
 SHARPE DEER PARK E130393.DWG, E131134.DWG, E131135.DWG,
 E131136.DWG, E132425.DWG, E132426.DWG, E132427.DWG, E132428.DWG,
 E132429.DWG,
 E132450.DWG, E132451.DWG, E132452.DWG, E132453.DWG, E132454.DWG,
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 E132485.DWG, E132486.DWG, E132487.DWG,

THIS DRAWING IS A MODIFICATION TO SHELL DWG NO. 102335-19.DWG



File Name: Site Plan.dwg
File Location: J:\Pr\Shell Oil\Deer Park Shell Chemical\ERP 2021



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DIAGRAM 2
SITE PLAN

SHEET 1

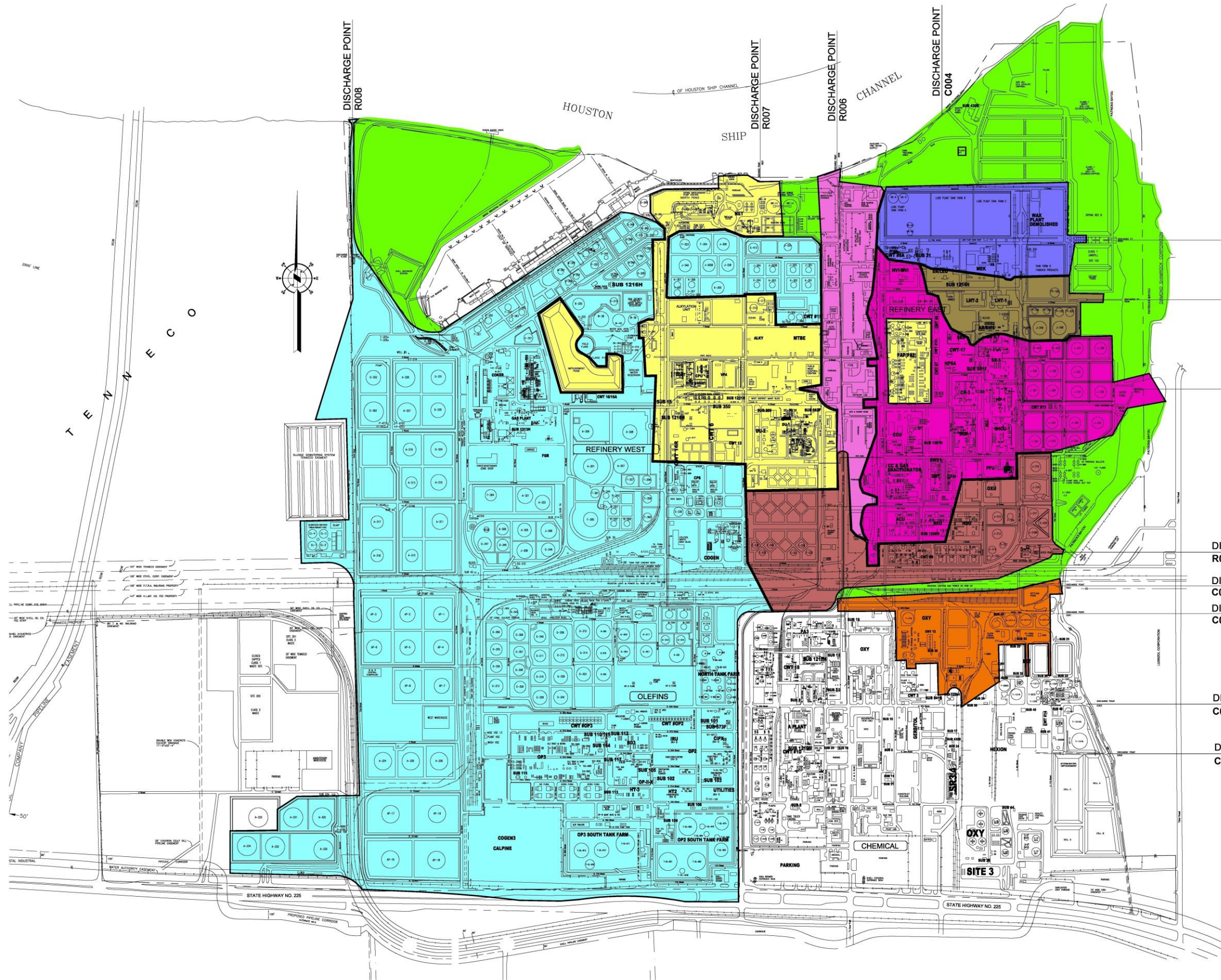
Printed By: Laurie on 7/26/2017, 16:59 PM
J:\P7\Shell Oil\Deer Park\SPCC 2017\SW Storage and Pump.mxd



**SHELL DEER PARK FACILITY
ICP**

**DIAGRAM 4
SURFACE WATER STORAGE AND PUMP BACK LOCATIONS**

| | |
|--------------|-------------------------|
| DRAWN BY: | L WILSON |
| APPROVED BY: | H FULTS |
| PROJECT NO: | SPCC 2017 |
| FILE NO. | SW Storage and Pump.mxd |
| DATE: | JULY, 2017 |



DISCHARGE POINT R008

DISCHARGE POINT R007

DISCHARGE POINT R006

DISCHARGE POINT C004

DISCHARGE POINT R004

DISCHARGE POINT R009

DISCHARGE POINT R003

DISCHARGE POINT R002

DISCHARGE POINT C005

DISCHARGE POINT C001

DISCHARGE POINT C003

DISCHARGE POINT C002

- Legend**
- Outfall C001/C005 Drainage Area
 - Outfall R002 Drainage Area
 - Outfall R003 Drainage Area
 - Outfall R004 Drainage Area
 - Outfall R006 Drainage Area
 - Outfall R007 Drainage Area
 - Outfall R008 Drainage Area
 - Outfall R009 Drainage Area
 - Storm Water Sheet Flow

DWG SOURCE:
PARSONS 443547 SHELL-PACAREA4.DWG

| |
|--|
| SHELL CHEMICAL FRP |
| DIAGRAM 5 DRAINAGE BASINS AND OUTFALL LOCATIONS |
| DATE: OCTOBER 2021 |
| |

DIAGRAM 6

Oil Boom Box Locations and Booming Strategies

The complex has two boom boxes containing 3500' of 18" boom. The boxes are located at Jones Point and at the Coast Guard Gate.



These gates are double locked with a Security and ER MOST lock. They will need to be monitored while open. Security can provide this activity.

West Dock Booming Strategy



HAZARDS:

Access to the backside of the dock must be made by passing under the structure walkway to the east (Boat #1 must have the VHF antenna lowered).

Or, under the pipe rack structure on the west end. Note the “normally” submerged items in the water under the pipe rack supports.



Working a boat close to shore will have the potential to impact the underwater bulkhead.

There are also underwater obstacles to the east behind the West Dock.



Picture taken looking east from the West Dock Walkway at extreme low tide.

Center Dock Booming Strategy

Booming the Center Dock is the most straightforward dock to boom off. Currently water access to the backside of the dock must be made underneath the Marine Dock Office.



Barge / East Dock Booming Strategy

Location:

The Barge Dock is located at the east end of the East Dock.

Hazards:

Directly under the Barge Dock are many pilings cut off just below the normal tide water level. Access to this area should be done with Jon boats.

Booming:

18" boom supply would be the Jones Point boom box.

10" boom can be pulled from our shallow water response boom trailer. Some assistance to booming can be made from catwalks under the Barge Dock.

Approach to the west side of the Barge Dock must be made with a Jon boat.

Booming at the Barge Dock only:



Booming the Barge Dock and a barge at the Barge Dock:



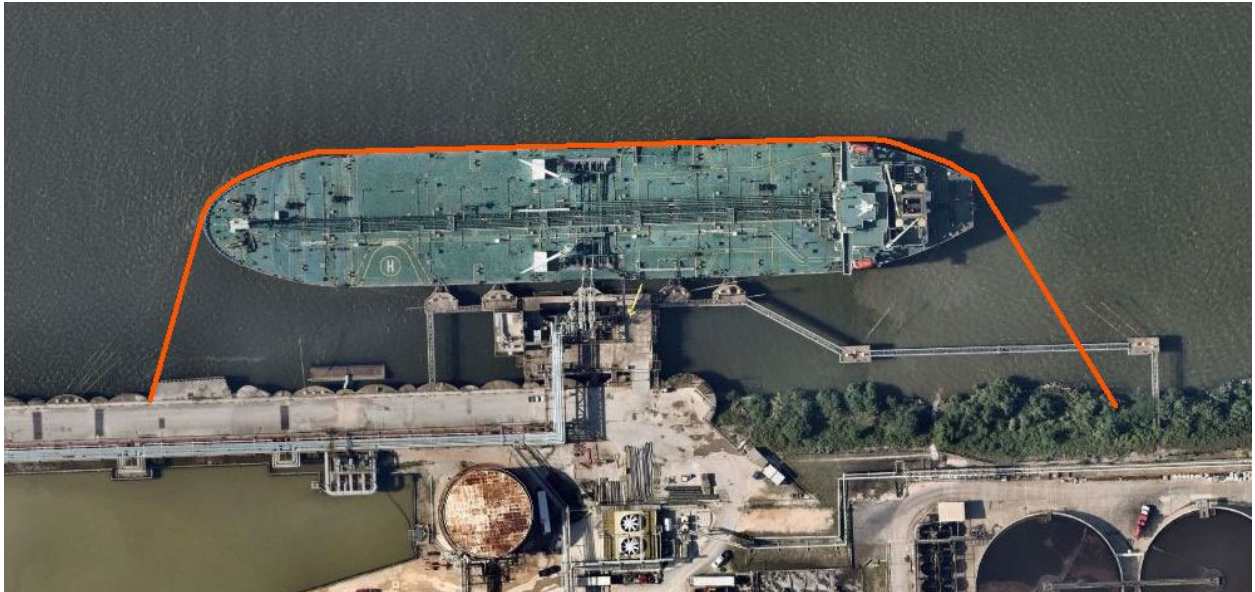
Booming the Barge Dock, East Dock, and any barge at the Barge Dock:



Crude Dock Booming Strategy

Boom for booming the crude dock is staged at the Coast Guard Gate (at the end of Center Street) boom box. This boom box contains 1800' of 18" boom.

If the spill includes the ship, the whole ship must be boomed in.



If the spill is related to only the dock, the boom can be placed under the dock allowing the ship to be cleaned and leave.



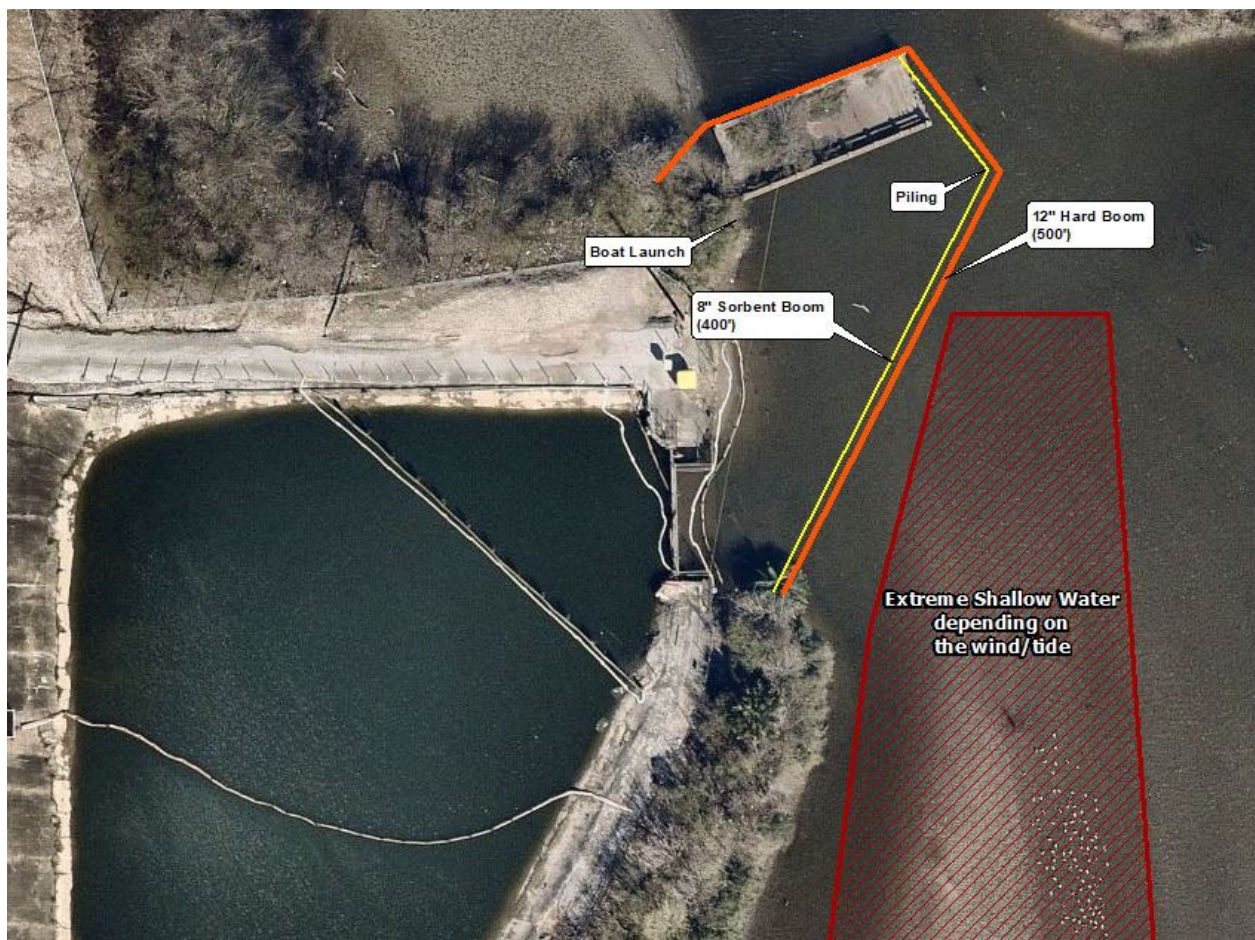
R-003 Booming Strategy

Patrick's Bayou is a Super Fund Site. Caution should be used to not disturb the bottom. Disturbing the bottom is allowed if it is necessary to deploy the boom to contain oil.

Safety Related Issues: The bank is all soil/mud, watch for slippery conditions. There is typically light to heavy vegetation growth in the area and on the old Highway Bridge.

The gate is just to the north of the road along the north side of the outer pond.

Boom for booming is not staged at the outfall. The MOST Boom Trailer "B" is set up for shallow water response. It contains 1000' of hard boom, 600' of 8" sorbent boom and a 14' Jon boat with a trolling motor for response in shallow water. Boom Trailer "B" also has other supplies for a booming response. With a north wind, it is not recommended to place sorbent boom along the north side of the bridge as the boom will become destroyed.

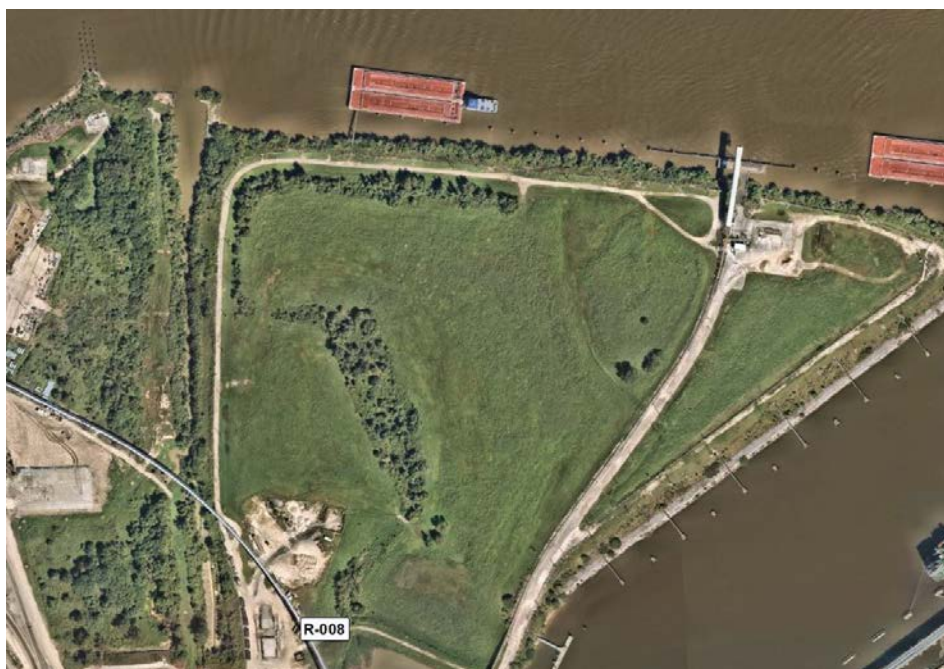


Booming Pre-Plan for R-008

R-008 is located at the north end of the “Big Ditch” on the west side of the complex. R-008 discharges into the Houston Ship Channel. 300’ of hard boom is required.



On the west side of the shoreline is rock. A “Do Not Dredge or Anchor” sign makes a good tie-off point. On the east side the shoreline is sandy beach. The boom may need to be walked back from the point. There are three culverts going through the peninsula, this is the reason for booming back to the shoreline on the east side.



SHELL DEER PARK MANUFACTURING COMPLEX – LOGISTICS DOCKS

COMPLEX ALARM:

BUILDING EVACUATION (FIRES) --- ONE LONG HORN BLAST
APPROXIMATELY 15 SECONDS

CALL-TO-ASSEMBLE (GAS/MATERIAL RELEASE) --- SIX HORN BLASTS
APPROXIMATELY 2 SECONDS EACH

FACILITY:

LOCATION: 8500 N 29° 43' 55.37"

THE DEER PARK MANUFACTURING COMPLEX DOCK FACILITY IS LOCATED IN A PRIVATE SLIP ON THE SOUTH SIDE OF THE HOUSTON SHIP CHANNEL. THE FACILITY CAN BE LOCATED APPROXIMATELY AT STATION 884 + 00 (CORPS OF ENGINEERS) NEAR DEER PARK, TEXAS. ADDITIONALLY, IT CAN BE LOCATED RELATIVE TO HARVEY LOCKS, LOUISIANA (INTERCOASTAL WATERWAY) AT MILE 386.3 WEST.

THE MAILING ADDRESS IS:

SHELL DOCKS
SHELL OIL COMPANY
DEER PARK MANUFACTURING COMPLEX
P.O. BOX 100
DEER PARK, TEXAS 77536

DESCRIPTION:

THE FACILITY CONSISTS OF THREE (3) INDIVIDUAL BERTHS, OR DOCKS, ONE (1) AUXILIARY BARGE DOCK, AND ONE (1) TUG DOCK, ALL LOCATED WITHIN THE SLIP. THERE IS ALSO ONE (1) BERTH, THE CRUDE DOCK, LOCATED OUTSIDE THE SLIP.

THE SHELL SLIP IS APPROXIMATELY 2,600 FT. LONG AND 630 FT. WIDE. IT IS 440 FT. FROM THE MAIN DOCKS TO THE BARGE TIE OFF BOLLARDS ON THE NORTH BANK. THIS AREA IS DREDGED TO A DEPTH OF FORTY (40) FEET AT THE MAIN DOCKS AND MAINTAINS THIS DEPTH FOR 325 FT. AT THIS POINT THE DREDGING BEGINS TO GRADUALLY SLOPE UPWARD FOR THE NEXT 115 FT. TO A DEPTH OF 20 FT. MAINTAINING THIS DEPTH FOR THE 90 FT. THE SLIP THEN SLOPES UP TO THE TOP OF THE DIKE.

VESSELS ACCOMMODATIONS:

THE FACILITY CAN ACCOMMODATE THREE (3) 80,000 TON TANKERS AND ONE (1) 25,000 TON TANKER OR FOUR (4) 25,000 TON TANKERS INSIDE THE SLIP AND ONE (1) 80,000 TON TANKER AT THE CRUDE DOCK, PLUS TWO (2) BARGES AT THE BARGE DOCK.

IN LIEU OF TANKERS, THE DOCKS CAN ACCOMMODATE FOURTEEN (14) BARGES SIMULTANEOUSLY. THIS CAN BE ACCOMPLISHED BY HAVING TWO (2) AT THE BARGE DOCK AND FOUR (4) TIED TWO (2) AHEAD, AT EACH OF THE MAIN DOCKS. MANY COMBINATIONS OF BARGES AND TANKERS ARE ALSO POSSIBLE. THE TUG BOAT DOCK IS AVAILABLE TO TUGS AT ALL TIMES FOR MOORING PURPOSES, WHILE WAITING FOR THEIR BARGES TO LOAD/UNLOAD.

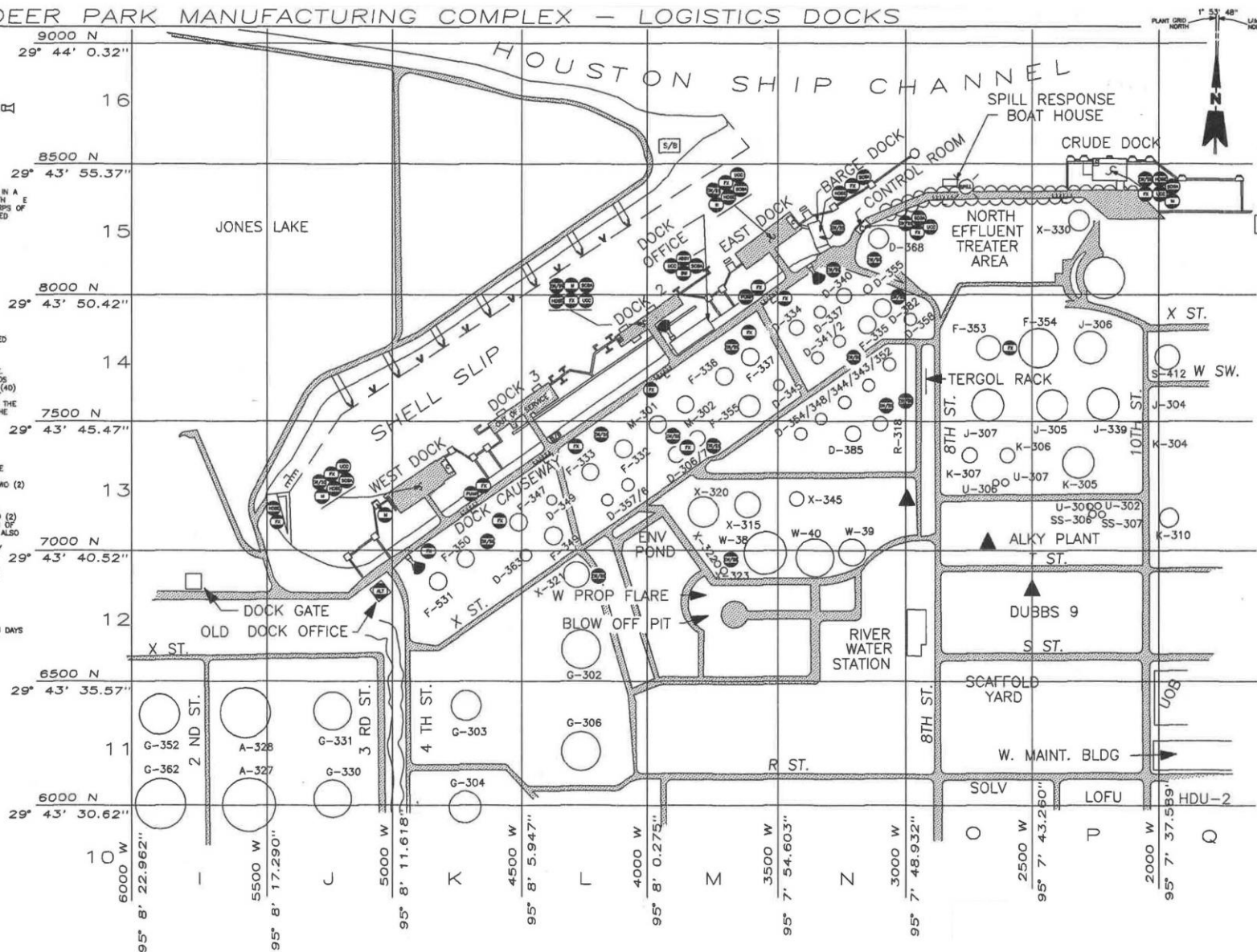
THE TRANSFER OF BARGES TIED TWO (2) AHEAD IS PERMITTED ONLY WHEN EACH BARGE IS STAFFED WITH A TANKERMAN.

HOURS OF OPERATION:

THE DOCK FACILITY OPERATES TWENTY FOUR (24) HOURS DAILY, SEVEN DAYS A WEEK.

LEGEND

- UCC RADIO MONITOR
- BUILDING WARDEN
- FIRE EXTINGUISHER(S)
- FIRE HOSE
- EYE WASH / SAFETY SHOWER(S)
- CALL TO ASSEMBLY LOCATION
- ALTERNATE CALL TO ASSEMBLY LOCATION
- ALARM HORN BOX
- FIRE MONITOR(S)
- SPILL BUILDING
- FIRE PUMP(S)
- CONTROL ROOM
- SPILL CONTAINMENT BUILDING
- FIRE WATER CONNECTIONS
- SPILL/FIRE ALARM



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**DIAGRAM 7
DOCK LOCATIONS AND ER EQUIPMENT**

| | |
|--------------|----------------|
| APPROVED BY: | M FULLER |
| PROJECT NO: | ICP 2021 |
| FILE NO: | DOCK LOCATIONS |
| DATE: | JUNE 2021 |

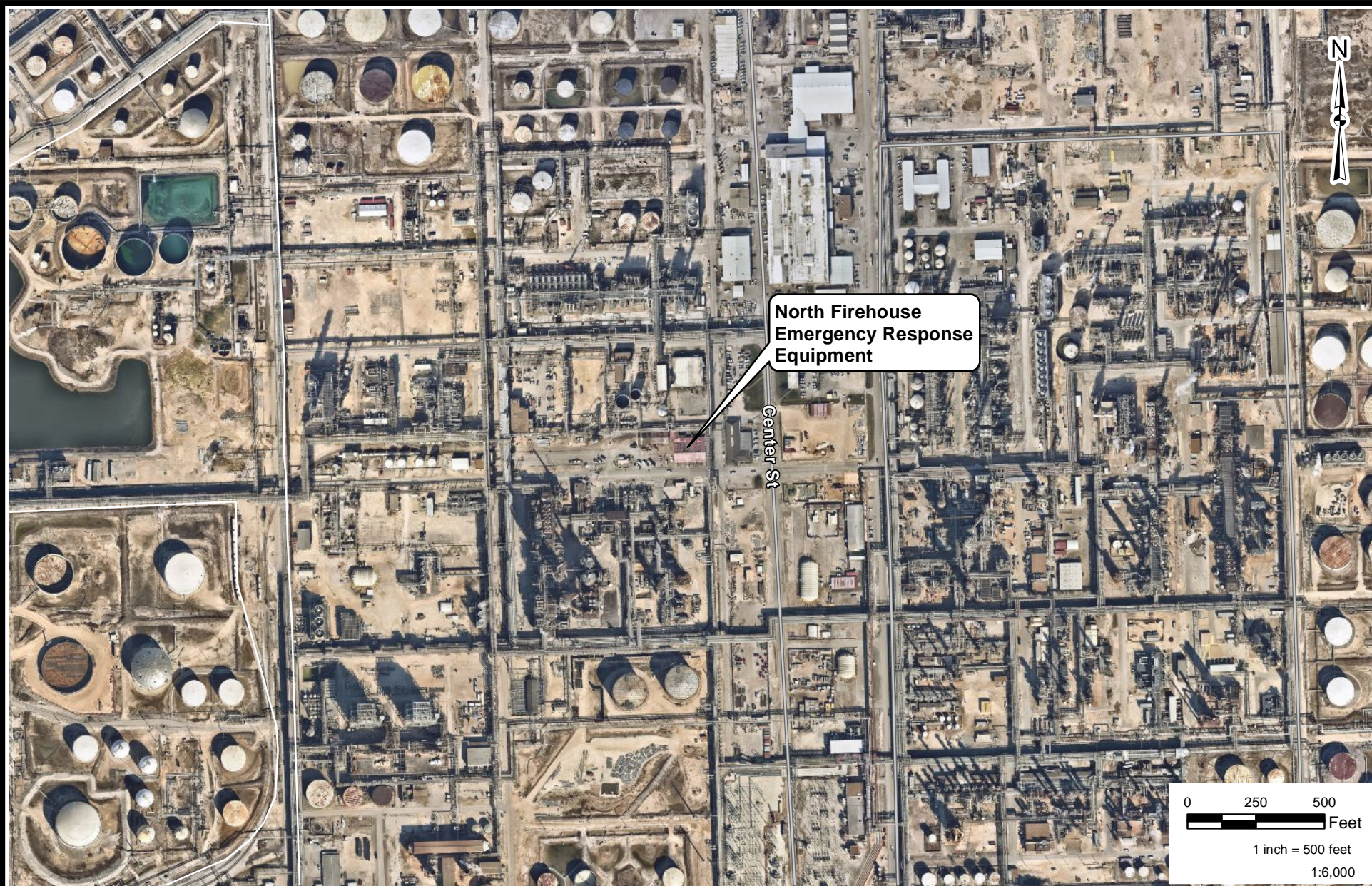


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**DIAGRAM 8
 FACILITY EMERGENCY RESPONSE EQUIPMENT AND
 EMERGENCY OPERATIONS CENTER LOCATIONS - SHEET 1 OF 6**

| | |
|--------------|--------------------------|
| DRAWN BY: | L WILSON |
| APPROVED BY: | M FULLER |
| PROJECT NO: | ICP 2021 |
| FILE NO. | 8 Emergency Response.mxd |
| DATE: | JUNE 2021 |



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**DIAGRAM 8
FACILITY EMERGENCY RESPONSE EQUIPMENT AND
EMERGENCY OPERATIONS CENTER LOCATIONS - SHEET 2 OF 6**

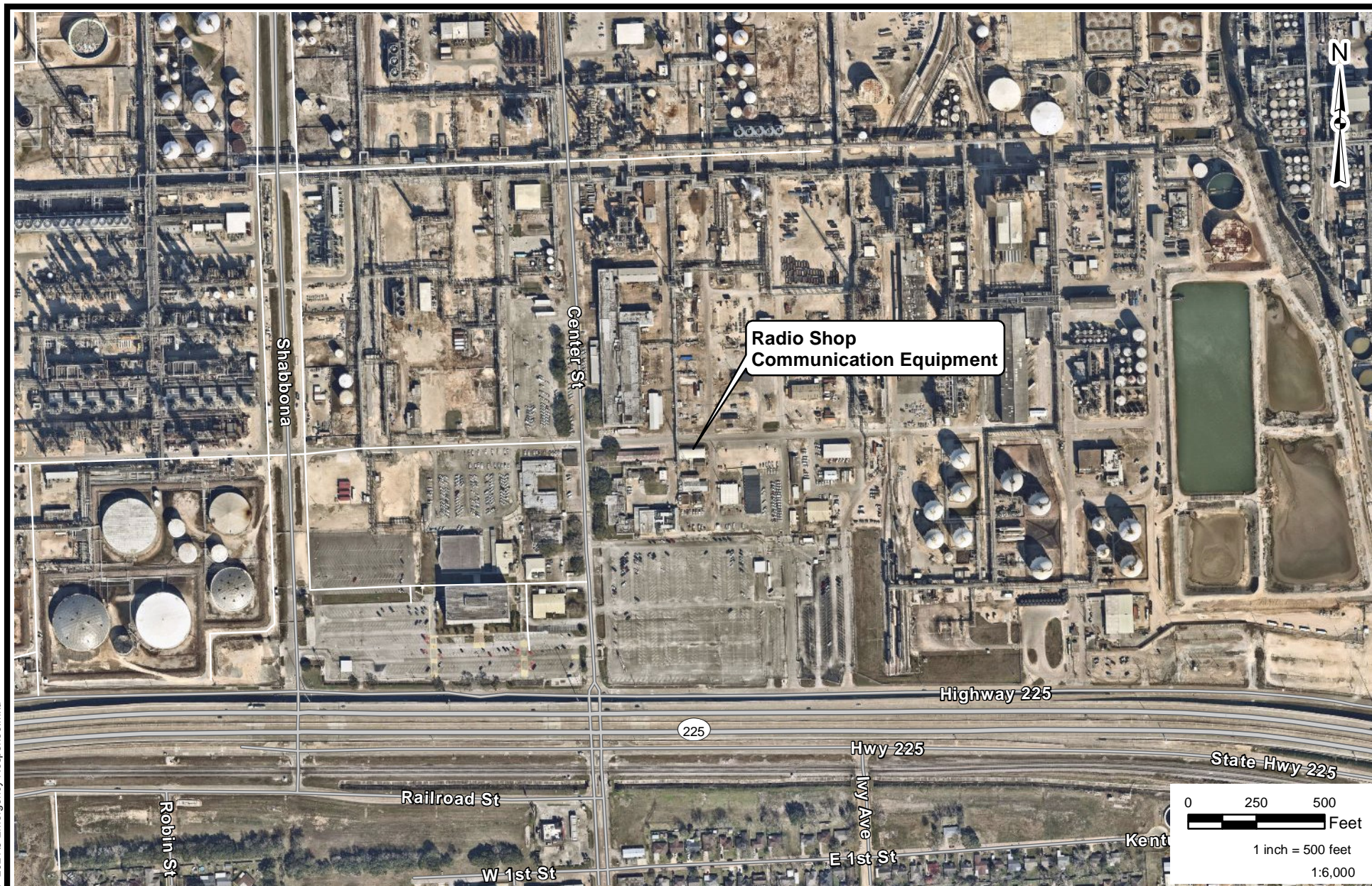
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|--------------|--------------------------|
| DRAWN BY: | L WILSON |
| APPROVED BY: | M FULLER |
| PROJECT NO: | ICP 2021 |
| FILE NO. | 8 Emergency Response.mxd |
| DATE: | JUNE 2021 |



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**DIAGRAM 8
FACILITY EMERGENCY RESPONSE EQUIPMENT AND
EMERGENCY OPERATIONS CENTER LOCATIONS - SHEET 3 OF 6**

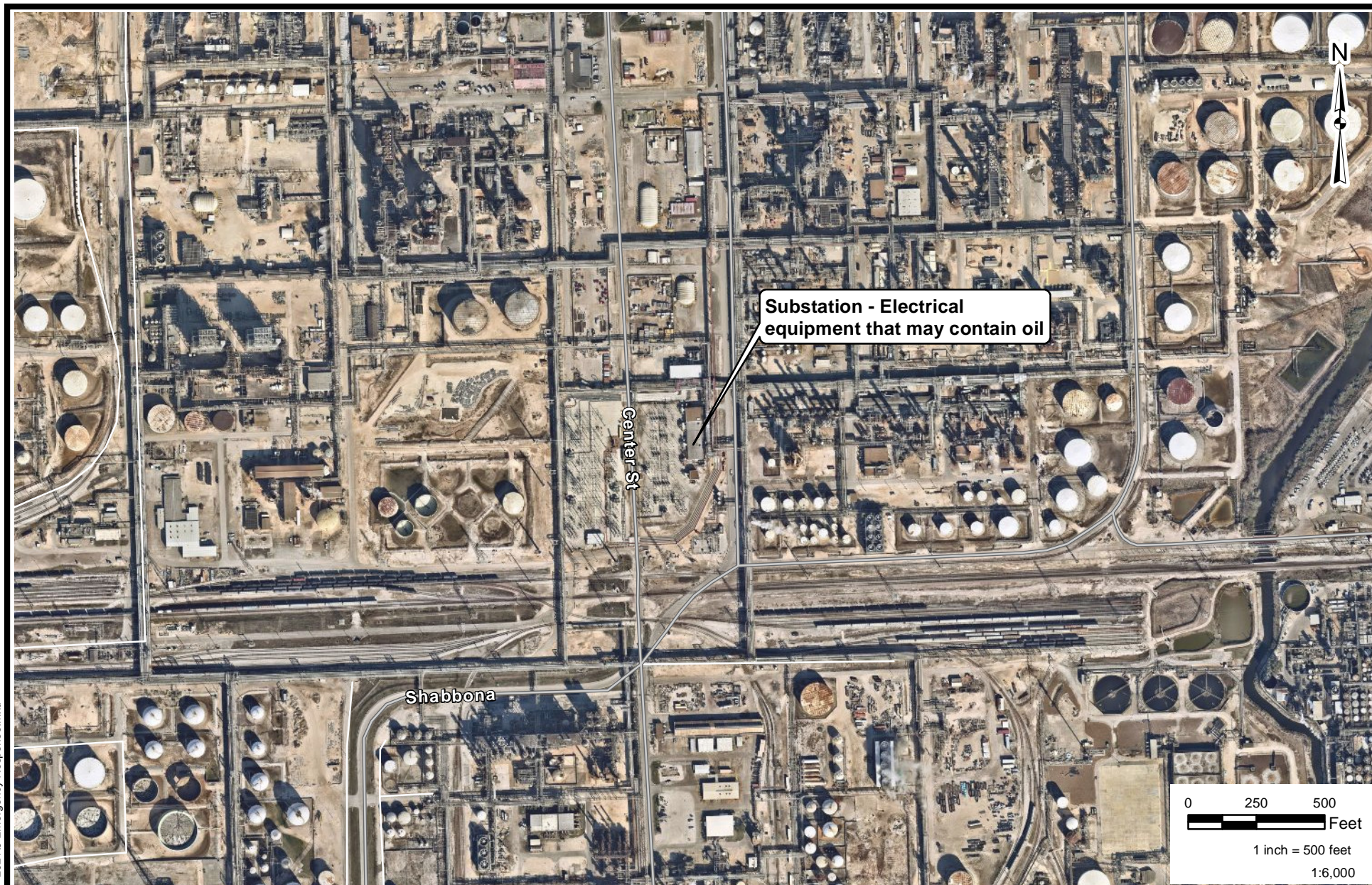
| | |
|--------------|--------------------------|
| DRAWN BY: | L WILSON |
| APPROVED BY: | M FULLER |
| PROJECT NO: | ICP 2021 |
| FILE NO. | 8 Emergency Response.mxd |
| DATE: | JUNE 2021 |



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**DIAGRAM 8
FACILITY EMERGENCY RESPONSE EQUIPMENT AND
EMERGENCY OPERATIONS CENTER LOCATIONS - SHEET 4 OF 6**

| | |
|--------------|--------------------------|
| DRAWN BY: | L WILSON |
| APPROVED BY: | M FULLER |
| PROJECT NO: | ICP 2021 |
| FILE NO. | 8 Emergency Response.mxd |
| DATE: | JUNE 2021 |



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**DIAGRAM 8
FACILITY EMERGENCY RESPONSE EQUIPMENT AND
EMERGENCY OPERATIONS CENTER LOCATIONS - SHEET 5 OF 6**

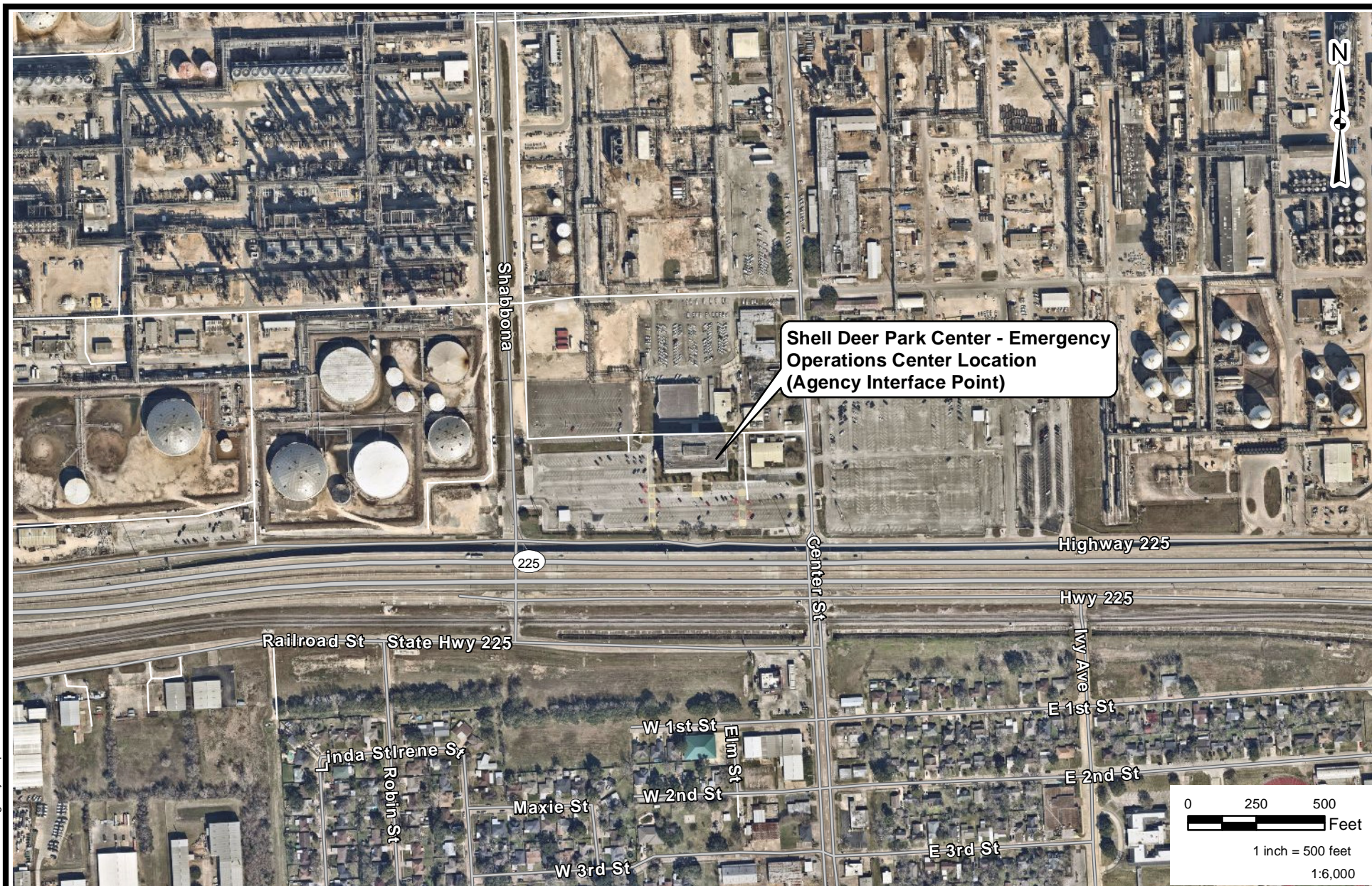
DRAWN BY: L WILSON

APPROVED BY: M FULLER

PROJECT NO: ICP 2021

FILE NO. 8 Emergency Response.mxd

DATE: JUNE 2021



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**DIAGRAM 8
FACILITY EMERGENCY RESPONSE EQUIPMENT AND
EMERGENCY OPERATIONS CENTER LOCATIONS - SHEET 6 OF 6**

| | |
|--------------|--------------------------|
| DRAWN BY: | L WILSON |
| APPROVED BY: | M FULLER |
| PROJECT NO: | ICP 2021 |
| FILE NO. | 8 Emergency Response.mxd |
| DATE: | JUNE 2021 |